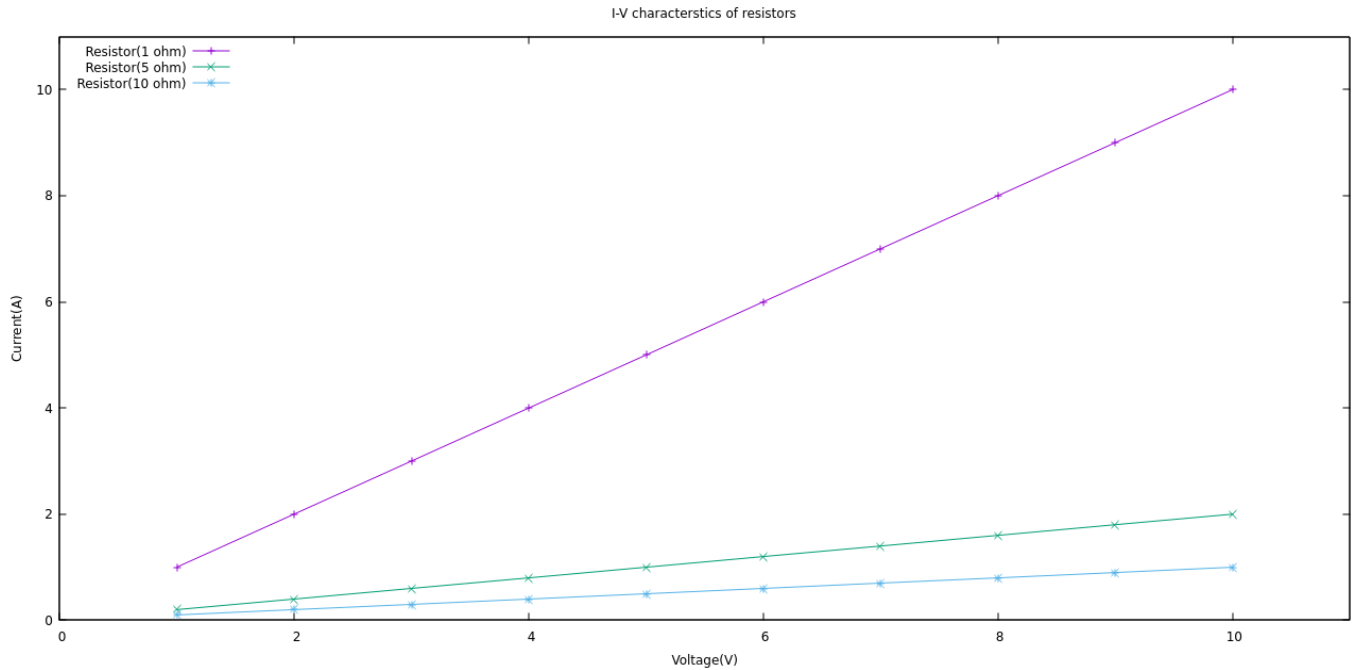


# ASSIGNMENT#1

## 1. Resistors



### 1 ohm Resistor

CURRENT	VOLTAGE
1.000	1.000
2.000	2.000
3.000	3.000
4.000	4.000
5.000	5.000
6.000	6.000
7.000	7.000
8.000	8.000
9.000	9.000
10.000	10.000

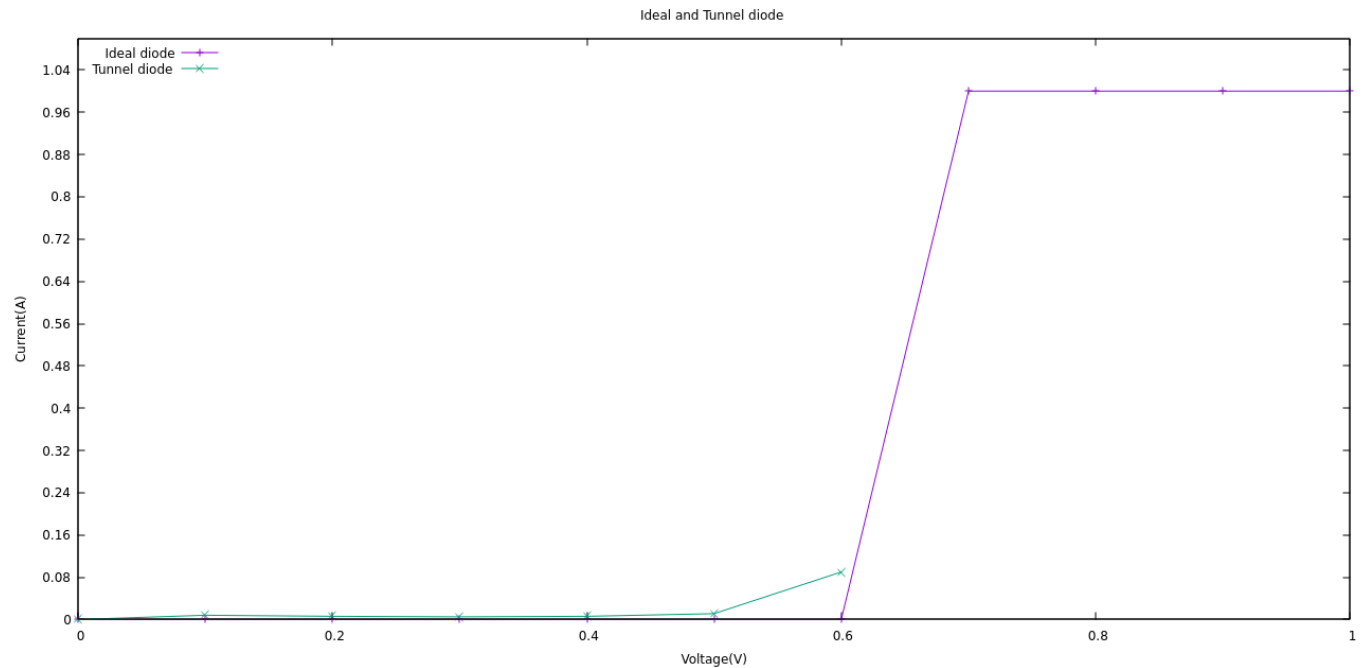
### 5 ohm Resistor

CURRENT	VOLTAGE
1.000	0.2000
2.000	0.4000
3.000	0.6000
4.000	0.8000
5.000	1.0000
6.000	1.2000
7.000	1.4000
8.000	1.6000
9.000	1.8000
10.000	2.0000

### 10 ohm Resistor

CURRENT	VOLTAGE
1.000	0.100
2.000	0.200
3.000	0.300
4.000	0.400
5.000	0.500
6.000	0.600
7.000	0.700
8.000	0.800
9.000	0.900
10.000	1.000

## 2. Ideal diode and tunnel diode



### Ideal Diode

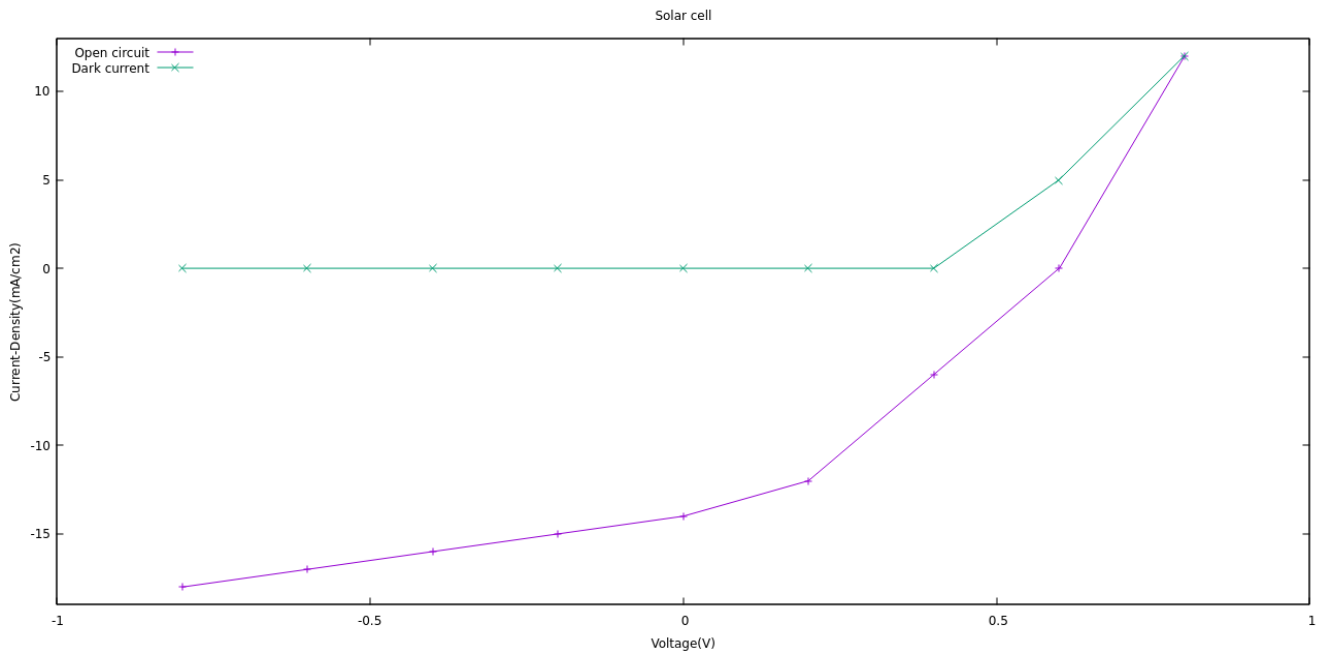
VOLTAGE	CURRENT
0	0
0.1	0
0.2	0
0.3	0
0.4	0
0.5	0
0.6	0
0.7	1
0.8	1
0.9	1
1.0	1

### Tunnel Diode

VOLTAGE	CURRENT
0	0
0.1	0.008
0.2	0.006

0.3	0.005
0.4	0.006
0.5	0.011
0.6	0.090

### 3. Solar cell



#### Open Circuit

Voltage	Current-Density
-0.8	-18
-0.6	-17
-0.4	-16
-0.2	-15
0	-14
0.2	-12
0.4	-6
0.6	0
0.8	12

#### DARK CURRENT

Voltage	Current Density
-0.8	0

-0.6	0
-0.4	0
-0.2	0
0	0
0.2	0
0.4	0
0.6	5
0.8	12

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